

SECTION 1

PROGRAM MANAGEMENT

01.A GENERAL

01.A.01 No person shall be required or instructed to work in surroundings or under conditions that are unsafe or dangerous to his or her health.

01.A.02 The employer shall be responsible for initiating and maintaining a safety and health program that complies with the US Army Corps of Engineers (USACE) safety and health requirements.

01.A.03 Each individual employee is responsible for complying with applicable safety requirements, wearing prescribed safety equipment, and preventing avoidable accidents.

01.A.04 Safety and health programs, documents, signs, and tags shall be communicated to employees in a language that they understand.

01.A.05 On USACE activities where employees are engaged in other than routine office/administrative functions, a project safety and health plan shall be developed and implemented. > see Section 28 for hazardous, toxic and radioactive waste activities

a. Such activities include operations and maintenance; recreational resource management; surveying, inspection, and testing; construction management; warehousing; transportation; research and development; and other activities when the designated authority and the command safety and occupational health office agree on the benefit of such a program in accident prevention.

b. The project safety and health plan should address applicable items listed in Appendix A in addition to the USACE Command's safety and occupational health program requirements.

01.A.06 A position hazard analysis shall be prepared and documented for each USACE position as warranted by the hazards associated with the position's tasks.

- a. The designated authority, using the advice of the safety and occupational health office, shall determine the need for an analysis for each position within his or her area of responsibility.
- b. In developing the analysis for a particular position, supervisors should draw upon the knowledge and experience of employees in that position and the safety and occupational health office.

01.A.07 Before initiation of work at the job site, an accident prevention plan - written by the prime contractor for the specific work and hazards of the contract and implementing in detail the pertinent requirements of this manual - will be reviewed and found acceptable by designated Government personnel. **> See 28.B.01 and Appendix A**

- a. The plan will be developed by qualified personnel and will be signed by a competent person and a representative of the prime contractor's project management team.
- b. On contract operations the contractor's plan will be job-specific and will include work to be performed by subcontractors and measures to be taken by the contractor to control hazards associated with materials, services, or equipment provided by suppliers.

01.A.08 Inspections.

- a. The accident prevention plan shall provide for frequent safety inspections, conducted by competent persons, of the work sites, material, and equipment to ensure compliance with the plan and this manual.
- b. In addition to the requirements of subparagraph a., contractor quality control personnel - as part of their quality control

responsibilities - shall conduct and document daily safety inspections.

- c. Identified safety and health issues and deficiencies, and the actions, timetable, and responsibility for correcting the deficiencies, shall be recorded in inspection reports: follow-up inspections to ensure correction of any identified deficiencies shall be conducted and documented in a like manner.

01.A.09 Before beginning each activity involving a type of work presenting hazards not experienced in previous project operations or where a new work crew or subcontractor is to perform the work, activity hazard analyses shall be prepared by the contractors performing the work activity. **> *See Figure 1-1 for outline of analysis***

- a. Analyses will define the activities being performed and identify the sequences of work, the specific hazards anticipated, and the control measures to be implemented to eliminate or reduce each hazard to an acceptable level.
- b. Work will not begin until the hazard analysis for the work activity has been accepted by the Government's designated authority and discussed with all engaged in the activity, including the contractor, subcontractor(s), and Government on-site representatives.

01.A.10 An activity hazard analysis shall be prepared and documented for each USACE activity as warranted by the hazards associated with the activity. Generally, an activity hazard analysis shall be prepared for all field operations.

- a. The designated authority, using the advice of the safety and occupational health office, shall determine the need for an analysis for each activity within their area of responsibility.
- b. In developing the analysis for a particular activity, supervisors should draw upon the knowledge and experience of employees

FIGURE 1-1
ACTIVITY HAZARD ANALYSIS

ACTIVITY _____	ANALYZED BY/DATE _____	
PRINCIPAL STEPS	POTENTIAL SAFETY/HEALTH HAZARDS	RECOMMENDED CONTROLS
Identify the principal steps involved and the sequence of work activities	Analyze each principal step for potential hazards	Develop specific controls for each potential hazard
EQUIPMENT TO BE USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS
List equipment to be used in the work activity	List inspection requirements for the work activity	List training requirements, including hazard communication

in that activity and the safety and occupational health office.

01.A.11 To assure compliance with this manual, the contractor may be required to prepare for review specific safety and occupational health submittal items. These submittal items may be specifically required by this manual or may be identified in the contract or by the Contracting Officer's Representative (COR).

01.B INDOCTRINATION AND TRAINING

01.B.01 Employees shall be provided safety and health indoctrination and continuing safety and health training to enable them to perform their work in a safe manner. All training required by this manual shall be conducted by a qualified person(s).

01.B.02 Indoctrination and training shall be based on the safety and health program of the contractor or Government agency, as applicable, and shall include but not be limited to:

- a. requirements and responsibilities for accident prevention and maintaining safe and healthful work environments;
- b. general safety and health policy and procedures and pertinent provisions of this manual;
- c. employee and supervisor responsibilities for reporting all accidents;
- d. provisions for medical facilities and emergency response and procedures for obtaining medical treatment or emergency assistance;
- e. procedures for reporting and correcting unsafe conditions or practices; and
- f. job hazards and the means to control/eliminate those hazards, including applicable position and/or activity hazard analyses.

01.B.03 Safety meetings shall be conducted to review past activities, plan for new or changed operations, review pertinent aspects of appropriate activity hazard analyses (by trade), establish safe working procedures for anticipated hazards, and provide

pertinent safety and health training and motivation.

- a. Meetings shall be conducted at least once a month for all supervisors on the project location and at least once a week by supervisors or foremen for all workers.
- b. Meetings shall be documented, including the date, attendance, subjects discussed, and names of individual(s) who conducted the meeting. Documentation shall be maintained and copies furnished to the designated authority on request.

01.B.04 A hazard communication program shall be implemented in accordance with 29 CFR 1910.1200 or 1926.59.

- a. The written hazard communication program shall address, as a minimum, the following: training (to include potential safety and health effects from exposure), labeling, current inventory of hazardous chemicals on site, and the location and use of Material Safety Data Sheets (MSDSs).
- b. When hazardous substances are brought onto the job site, all employees potentially exposed to the substance will be advised of information in the MSDS for the substance.
- c. A copy of the MSDS for each hazardous substance at the project will be maintained in an inventory and will be provided to the designated authority and made available to all potentially exposed employees. For emergency response purposes, each entry in the inventory shall include the approximate quantities (e.g., liters, kilograms, gallons, pounds) that will be on site at any given time. In addition, a site map will be attached to the inventory showing where inventoried hazardous substances are stored. The inventory and the site map will be updated as frequently as necessary to ensure accuracy. > **The inventory and site map shall be integrated into requirements of this Section and paragraph 06.B.01**

01.B.05 Emergency situations.

- a. The employer shall provide training in handling emergency situations that may arise in the activities or use of equipment on the project.
- b. All persons who may have occasion to use emergency and rescue or lifesaving equipment shall be familiarized with the location of the equipment, trained in the proper use of the equipment and its capabilities and limitations, and medically qualified for its use.

01.C PHYSICAL QUALIFICATIONS OF EMPLOYEES

01.C.01 All persons shall be physically, medically, and emotionally qualified for performing the duties to which they are assigned. Some factors to be considered in making work assignments are strength, endurance, agility, coordination, and visual and hearing acuity.

01.C.02 At no time while on duty may employees use or be under the influence of alcohol, narcotics, intoxicants, or similar mind-altering substances. Employees found under the influence of or consuming such substances will be immediately removed from the job site. > **See Appendix A**

01.C.03 Operators of any equipment or vehicle shall be able to read and understand the signs, signals, and operating instructions in use.

01.C.04 Operators shall not be permitted to operate beyond the following limits.

- a. Operators of hoisting equipment, mobile construction equipment and draglines shall not be permitted to exceed 10 hours of duty time in any 24-hour period, including time worked at another occupation, without an interval of eight consecutive hours of rest.

b. Operators of other equipment and motor vehicles, while on duty, shall not operate equipment or vehicles for a continuous period of more than 10 hours in any 24-hour period without at least eight consecutive hours of rest; nor shall any employees, while on duty, operate any equipment or motor vehicles after being in a duty status for more than 12 hours during any 24-hour period without at least eight consecutive hours of rest. **> Variation in these requirements requires documented approval of the designated authority and notification of the Command's Safety and Occupational Health Office**

01.C.05 Compressed air workers.

- a. No person shall be permitted to enter a compressed air environment until examined by a licensed physician and found to be physically qualified to engage in such work.
- b. Any person working in a compressed air environment who is absent from work for 10 or more days, or is absent due to sickness or injury, shall not resume work until reexamined by a licensed physician, and found to be physically qualified to work in a compressed air environment.
- c. After a person has been continuously employed in compressed air for a period designated by a physician, but not to exceed one year, that person shall be reexamined by a physician to determine if still physically qualified to engage in compressed air work.
- d. All other requirements for compressed air work will be as specified in the contract technical provisions.

01.D ACCIDENT REPORTING AND RECORDKEEPING

01.D.01 All accidents that occur incidentally to an operation, project, or facility for which this manual is applicable will be investigated, reported, and analyzed as prescribed by the Government's

designated authority.

- a. Employees are responsible for reporting all injuries or occupationally-related illnesses as soon as possible to their employer or immediate supervisor.
- b. Employers and immediate supervisors are responsible for reporting all injuries to the designated authority within 24 hours.
- c. No supervisor shall decline to accept a report of injury from a subordinate.

01.D.02 An accident with any of the consequences listed below shall be immediately reported to the Government's designated authority: these accidents will be investigated in depth to identify all causes and to recommend hazard control measures.

> Contractors are responsible for notifying the Occupational Safety and Health Administration when one or more of their employees are seriously injured

- a. fatal injury,
- b. three or more persons admitted to a hospital, or
- c. property damage in an amount specified by the designated authority.

01.D.03 Except rescue and emergency measures, the accident scene shall not be disturbed until it has been released by the investigating official.

01.D.04 Daily records of all first aid treatments not otherwise reportable shall be maintained on prescribed forms and furnished to the designated authority upon request.

01.D.04 In addition to any other applicable requirements of this section on contract operations the prime contractor shall:

- a. maintain records of all exposure and accident experience incidental to the work (this includes exposure and accident

experience of the prime contractor and subcontractors, and as a minimum these records shall include exposure work-hours and a log of occupational injuries and illnesses - OSHA Form 200 or equivalent as prescribed by 29 CFR 1904);

b. maintain records of employee exposure to toxic materials and harmful physical agents (the prime contractor shall immediately notify the designated authority and employees of any excessive exposure experience and the hazard control measures that will be taken to control the exposure);

c. maintain access to the project's Workers Compensation Claims Report that details the compensable accidents experienced on the project by the contractor and subcontractor; and

d. submit project man-hours (also referred to as hours worked or exposure) to the COR monthly on the form provided by the COR.

01.E EMERGENCY PLANNING

01.E.01 Emergency plans to ensure employee safety in case of fire or other emergency shall be prepared, in writing, and reviewed with all affected employees. Emergency plans shall be tested to ensure their effectiveness.

a. Plans shall include escape procedures and routes; critical plant operations; employee accounting following an emergency evacuation; rescue and medical duties; means of reporting emergencies; persons to be contacted for information or clarification.

b. On-site emergency planning shall be integrated with off-site emergency support.

01.E.02 Planning for any operation shall include the total system response capabilities to minimize the consequences of accidents or natural disaster and shall consider communications, rescue, first aid, medical, emergency response, emergency equipment, and training requirements.

01.E.03 The number of persons permitted in any location shall be

limited to rescue and escape capability.

01.E.04 Emergency alert systems shall be developed, tested, and used to alert all persons likely to be affected by existing or imminent disaster conditions and to alert and summon emergency responders.

01.E.05 Emergency telephone numbers and reporting instructions for ambulance, physician, hospital, fire, and police shall be conspicuously posted at the work site.

01.E.06 An employee working alone in a remote location or away from other workers shall be provided a means of emergency communications.

DEFINITIONS

Accident prevention plan: a document that outlines occupational safety and health policy, responsibilities, and program requirements.

Activity hazard analysis: a documented process by which the steps (procedures) required to accomplish a work activity are outlined, the actual or potential hazards of each step are identified, and measures for the elimination or control of those hazards are developed.

Command: the USACE Major Subordinate Command, District, Laboratory, or Field Operating Activity with responsibility for a particular activity.

Competent person: one who can identify existing and predictable hazards in the working environment or working conditions that are dangerous to personnel and who has authorization to take prompt corrective measures to eliminate them.

Designated authority: the senior person in charge or his/her appointed representative for the operation being considered.

Position hazard analysis: a documented process by which the duties (or tasks) of an employee's job position are outlined, the actual or potential hazards of each duty are identified, and measures for the elimination or control of those hazards are developed.

Qualified person: one who, by possession of a recognized degree, certificate, or professional standing, or extensive knowledge, training, and experience, has successfully demonstrated his or her ability to solve or resolve problems related to the subject matter, the work, or the project.

SECTION 2

SANITATION

02.A DRINKING WATER

02.A.01 An adequate supply of drinking water shall be provided in all places of employment. Cool water shall be provided during hot weather.

a. Drinking water shall be supplied from sources approved by Federal, State, or local health authorities or treated by chemical treatment or boiled for 10 minutes and tested: if sediment is present, the water shall be clarified. Chemical treatment shall provide a residual chlorine content of 3/10 to 3/5 ppm.

b. Specific guidance regarding chemical treatment of drinking water for overseas (OCONUS) operations should be obtained from the HQUSACE Safety and Occupational Health Office.

02.A.02 Only approved potable water systems shall be used for the distribution of drinking water.

02.A.03 Drinking water shall be dispensed by means that prevent contamination between the consumer and source.

02.A.04 Portable drinking water dispensers shall be designed, constructed, and serviced to ensure sanitary conditions, shall be capable of being closed, and shall have a tap. Containers shall be clearly marked as to their contents and shall not be used for other purposes. Water shall not be dipped from containers.

02.A.05 Fountain dispensers shall have a guarded orifice.

02.A.06 Use of a common cup (a cup shared by more than one worker) is prohibited without the cup being sanitized between uses. Employees shall use cups when drinking from portable water coolers/containers. Unused disposable cups shall be kept in